

24/7 Monitoring of the CMS Computing infrastructure and facilities

Contributed to be given at [CHEP2010: International Conference on Computing in High Energy and Nuclear Physics 2010, 18-22 Oct 2010, Taipei \(Taiwan\)](#) The talk is pending decision by conf. organizers.

Abstract

The CMS offline computing system is composed of more than 50 sites and a number of central services to distribute, process and analyze data worldwide. A high level of stability and reliability is expected from the underlying infrastructure and services, partially covered by local or automated monitoring and alarming systems. However, dedicated computing shift personnel can further contribute to detect and react timely on any unexpected error, and hence ensure that CMS workflows are carried out efficiently and in sustained manner, in particular in the early phase of the LHC collision running. In order to support the high requirement on the readiness of a complex distributed computing system, CMS has established computing shift procedures, in form of distributed Computing Shift Personnel (CSP), operating worldwide from remote Computing Centers. The shifters are supported by a Computing Run Coordinator located at CERN, by core Computing Operators and by Experts on Call. Together these various actors form a coherent team to ensure the 24/7 monitoring, alarming and trouble shooting of the CMS offline computing system. We review the deployment of the CMS Computing Shift procedures and report on the experience gained throughout the first year LHC collision running. We describe how the efficient communication tools, the coherent monitoring framework, the pro-active alarming and trouble shooting procedures helped the CMS Computing facilities and infrastructure to maintain a high level of readiness.

Files

Bibliography

CMS groups

The content of this talk is related to the activities of the Computing group. The conveners or conference committee representatives of this group have enhanced CINCO administrative rights. They will be informed by e-mail about any changes and updates to the presentation title, abstract or file upload.

Instructions

You are not allowed to modify this presentation title or abstract. Please contact a member of the CMS conference committee to make changes. You can see the name of the selected speaker as well as the names of potential speakers that you nominated (including yourself). You can download and upload any file. This talk was originally created by Peter Kreuzer on 4/23/2010.